



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/620,022	09/14/2012	Anqi Andrew Huang	26295-21780	8819

87851 7590 04/28/2017
Facebook/Fenwick
Silicon Valley Center
801 California Street
Mountain View, CA 94041

EXAMINER

WHITAKER, ANDREW B

ART UNIT	PAPER NUMBER
----------	--------------

3629

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

04/28/2017

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptoc@fenwick.com
fwfacebookpatents@fenwick.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ANQI ANDREW HUANG, JONATHAN WARMAN,
JOSH WISEMAN, and EUGENE LETUCHY

Appeal 2015-004603
Application 13/620,022
Technology Center 3600

Before HUBERT C. LORIN, BIBHU R. MOHANTY, and
BRADLEY B. BAYAT, *Administrative Patent Judges*.

MOHANTY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellants seek our review under 35 U.S.C. § 134(a) of the Final Rejection of claims 2–8, 10–16, 18–29, 31–36, and 38 which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF THE DECISION

We AFFIRM.

THE INVENTION

The Appellants' claimed invention is directed to managing notifications provided to a user of events occurring in a social networking system that relate to the user. (Spec. para. 2). Claim 2, reproduced below with bracketed numerals added, is illustrative of the subject matter on appeal.

2. A computer-implemented method comprising:
 - [1] detecting an event associated with a user of a social networking system, the event being of an event type from a plurality of different event types;
 - [2] determining that a plurality of other events associated with the user of the same event type as the event have occurred;
 - [3] aggregating the event with the plurality of other events of the same event type;
 - [4] determining whether the aggregated events have reached a threshold to trigger a notification, the threshold corresponding to a notification rate comprising a continuous non-linear function that progressively decreases as a function of an increasing number of previously detected aggregated events of the same event type; and
 - [5] providing a notification of the aggregated events at the notification rate for the threshold to the user subject to the determination of whether the threshold has been reached.

THE REJECTIONS

The Examiner relies upon the following as evidence in support of the rejections:

Smith-Mickelson et al. US 2006/0059568 A1 Mar. 16, 2006
("Smith-Mickelson")

Baio et al. US 2008/0162510 A1 July 3, 2008
("Baio")

Kramer et al. US 2008/0306826 A1 Dec. 11, 2008
("Kramer")

Spiegelman et al. US 7,937,380 B2 May 3, 2011
("Spiegelman")

The following rejections are before us for review:¹

1. Claims 2–8, 10–16, 18–29, 31–36, and 38 are rejected under 35 U.S.C. § 101 as being directed to ineligible subject matter.
2. Claims 2–8, 10–16, 18–29, 31–36, and 38² are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 1–4, 6, 8–13, 15–18, 21–25, 27–31, 33, 35–36 and 40–42 in copending Application No. 12/649,705.
3. Claims 2–5, 9–15, 17–21, 25–36, and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Baio, Spiegelman, and Smith-Mickelson.
4. Claims 6–8, 16, and 22–24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Baio, Spiegelman, Smith-Mickelson, and Kramer.

¹ The rejection made under 35 U.S.C. § 112, second paragraph, has been withdrawn and is not present in the Answer. *See* Ans. 26.

² The heading of the rejection lists claims 2–38, but claims 9, 17, 30, and 37 are canceled. *See* Appeal Br. 17–23, Claims Appendix.

FINDINGS OF FACT

We have determined that the findings of fact in the Analysis section below are supported at least by a preponderance of the evidence.³

ANALYSIS

35 U.S.C. § 101

The Examiner has rejected claims 2–8, 10–16, 18–29, 31–36, and 38 under 35 U.S.C. § 101 (Ans. 25–26). In contrast, the Appellants have argued that this rejection under 35 U.S.C. § 101 is improper (Reply Br. 2–10).

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “laws of nature, natural phenomena, and abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014).

In judging whether claim 2 falls within the excluded category of abstract ideas, we are guided in our analysis by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)). In accordance with that framework, we first determine whether the claim is “directed to” a patent-ineligible abstract idea. If so, we then consider the elements of the claim both individually and as “an ordered

³ *See Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Patent Office).

combination” to determine whether the additional elements “transform the nature of the claim” into a patent-eligible application of the abstract idea. *Id.* This is a search for an “inventive concept” — an element or combination of elements sufficient to ensure that the claim amounts to “significantly more” than the abstract idea itself. *Id.* The Court also stated that “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Id.* at 2358.

Here, we find that the claim is directed to the concept of providing notifications using a mathematical formula. In this case, the process of providing notifications is directed to providing notifications associated with events and is a method of organizing human activities and an abstract idea beyond the scope of § 101.

The Appellants argue that claim 2 involves a mathematical formula, but is not “directed to” a mathematical formula or abstract idea. We disagree and find that the claim is directed to calculating a threshold for triggering notifications. *Cf. Parker v. Flook*, 437 U.S. 584, 592–96 (1978) (holding a claim directed to a method for updating the value of an alarm limit in the catalytic chemical conversion of hydrocarbons invalid under Section 101).

The Appellants have also argued that claim 2 is an improvement in the technical field of computer technology and online communications. Reply Br. 9–10. We disagree and find the claim is not rooted in technology but rather directed to the abstract idea of providing notifications associated with events.

We note the point about pre-emption. Reply Br. 5. While pre-emption “might tend to impede innovation more than it would tend to

promote it, ‘thereby thwarting the primary object of the patent laws’” (*Alice*, 134 S. Ct. at 2354 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012))), “the absence of complete preemption does not demonstrate patent eligibility” (*Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015)). *See also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015), cert. denied, 136 S. Ct. 701, 193 (2015)(“[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.”).

We next consider whether additional elements of the claim, both individually and as an ordered combination, transform the nature of the claim into a patent-eligible application of the abstract idea, e.g., whether the claim does more than simply instruct the practitioner to implement the abstract idea using generic computer components. We conclude that it does not. Considering each of the claim elements both individually and as an ordered combination, the function performed by the computer at each step of the process is purely conventional. Although the method is nominally “computer-implemented,” each step of the claimed method does no more than require a generic computer to perform generic computer functions.

For these reasons the rejection of claim 2 and its dependent claims is sustained. Independent claims 11, 19, and 32 are directed to methods that include similar steps and perform the same concept as claim 2. Accordingly, the rejection of independent claims 11, 19, and 32, and their corresponding dependent claims is sustained for the same reasons.

*Provisional Rejection under Nonstatutory Obviousness-Type Double
Patenting*

The Appellants have provided no arguments in response to the provisional nonstatutory obviousness-type double patenting rejection and this provisional rejection is therefore summarily affirmed.

35 U.S.C. § 103(a)

The Appellants argue, *inter alia*, that the rejection of claim 2 is improper because the Examiner has not shown that the prior art discloses “a continuous non-linear function” as required by claim 2 in limitation [4] (App. Br. 6–12; *see also* Reply Br. 10–14). According to the Appellants, the portions of Smith-Mickelson cited by the Examiner refer to decaying the weight of a detected event as a function of time (App. Br. 8).

In contrast, the Examiner has determined that the above limitation is found in Smith-Mickelson at Figure 4 and at paragraphs 24 and 28–31 (Final Act. 8–9; Ans. 8, 27). According to the Examiner, “[i]t is the decay of the incrementing value as shown below which is the progressively decreasing function as the number of increasing previously detected events occur” (Ans. 27).

We agree with the Appellants.

Here, the argued claim limitation requires “a notification rate comprising a continuous non-linear function that progressively decreases as a function of an increasing number of previously detected aggregated events of the same event type.” The above citations to Smith-Mickelson fail to disclose this. The metric “m” of Smith-Mickelson increases as a function of the number of events, and decays as a function of time. When the metric “m” is above a threshold “M,” messages are blocked. Although Smith-

Mickelson discloses a decay function that decreases the metric “m” as a function of time in order to clear a block state, the cited portions do not disclose a notification rate “that progressively decreases as a function of an increasing number of previously detected aggregated events.”

For these reasons the rejection of claim 2 and its dependent claims is not sustained. The remaining claims contain a similar limitation and the rejection of these claims is not sustained for the same reasons given above.

CONCLUSIONS OF LAW

We conclude that the Appellants have not shown that the Examiner erred in rejecting the claims under 35 U.S.C. § 101.

We conclude that the provisional nonstatutory obviousness-type double patenting rejection is summarily affirmed as no arguments have been presented.

We conclude that the Appellants have shown that the Examiner erred in rejecting the claims under 35 U.S.C. § 103(a) as listed in the rejections section above.

DECISION

The Examiner’s rejection of claims 2–8, 10–16, 18–29, 31–36, and 38 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED